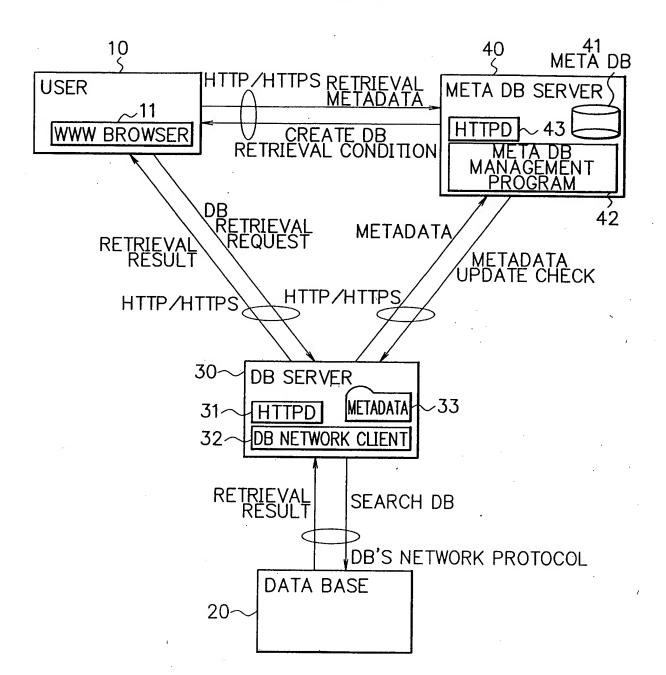
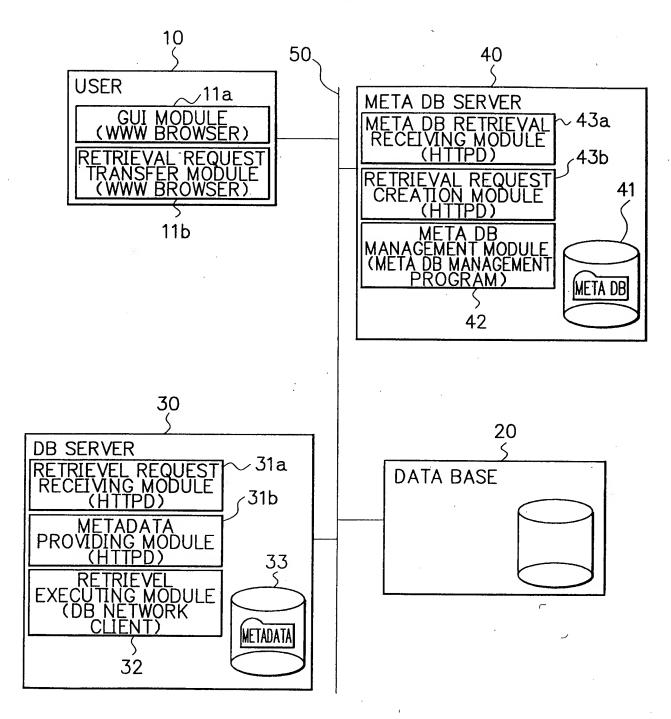
TABLE C (REAL TABLE) c1 (KEY) |c2 |c3 တ ∞ x2 x3 x4 x5 x6 x7 x8 x9 2 3 4 5 6 7 8 9 b1 (KEY) b2b3b4b5 ∞ TABLE B (REAL TABLE) _ F I G. 1 5 6 al (KEY) a2 a3 a4 TABLE A (REAL TABLE) $\overline{\times}$ 2 3 VIEW X

F I G. 2

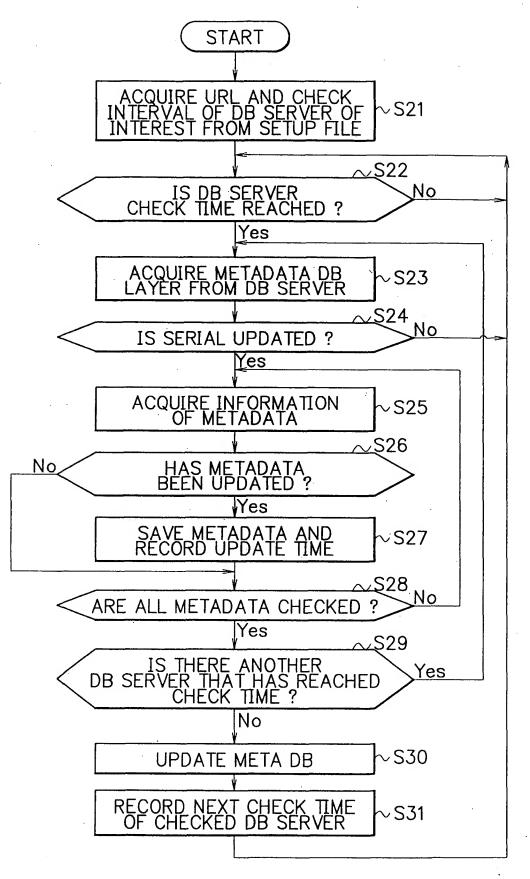


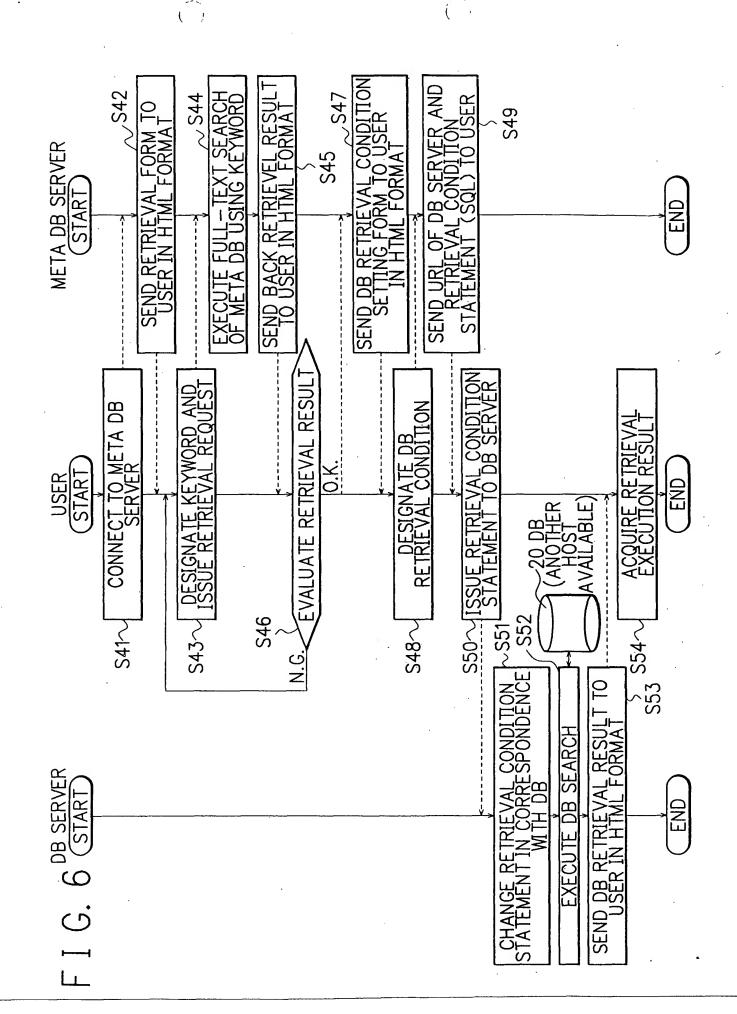
F I G. 3



F I G. 4 START ADMINISTRATOR OF DB SERVER CREATES METADATA \sim S1 ADMINISTRATOR OF META DB SERVER REGISTERS INFORMATION ~S2 REQUIRED FOR ACQUIRING METADATA FROM DB SERVER META DB SERVER ACQUIRES METADATA FROM DB SERVER ∨S3 META DB SERVER CREATES OR UPDATES META DB \sim S4 USER ISSUES INQUIRY TO MATA DB SERVER \sim S5 META DB SERVER SEARCHES MATA DB \sim S6 META DB SERVER TRANSMITS INQUIRY RESULT TO USER ∨S7 ∠S8 ` IS USER SATISFIED WITH RESULT? No √Yes USER ISSUES RETRIEVAL REQUEST TO DB SERVER \sim S9 DB SERVER TRANSLATES RETRIEVAL REQUEST INTO FORMAT CONCORDANT WITH DB \sim S10 DB SERVER SEARCHES DB √S11 DB SERVER TRANSMITS RETRIEVAL RESULT TO USER \sim S12 **END**

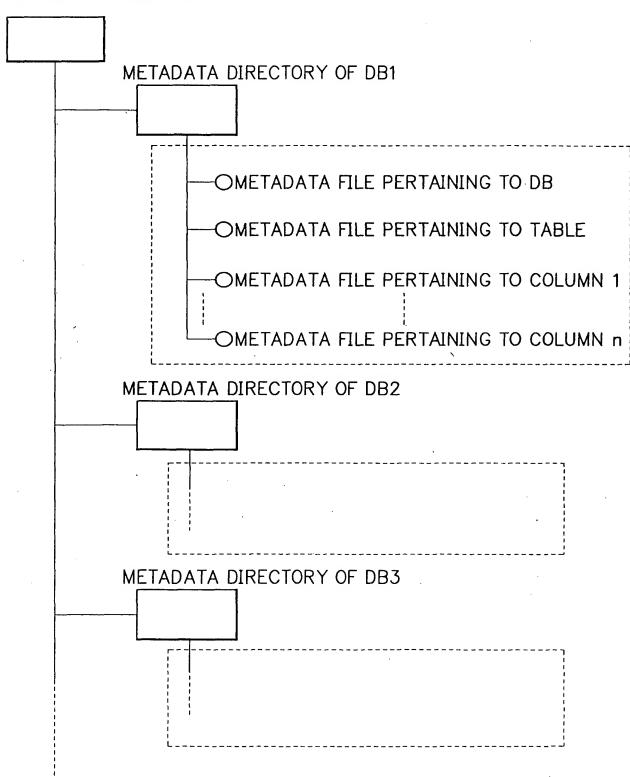
F I G. 5





F I G. 7

METADATA DIRECTORY



F 1 5.00

LAYER DATABASE FORMAT DBKEY,DBEXPL,DBMS,DBLIMIT,SERIAL,CHECK,RETRY,EMAIL,TBLFILE,DBNAME,SQLURL

DATA DEMO; MEMBER,¥

MEMBER INFORMATION,¥

OracleWorkgroupServer—7.3,¥

allow @foo.co.jp;deny all,¥

19971225000000,¥

3600,¥

600,¥

dbnavi@foo.co.jp, ¥ tables.html, ¥ demo@navi.foo.co.ip, ¥

demo@navi.foo.co.jp, \text{\$\psi} \text{\$\ps

F I G. 9

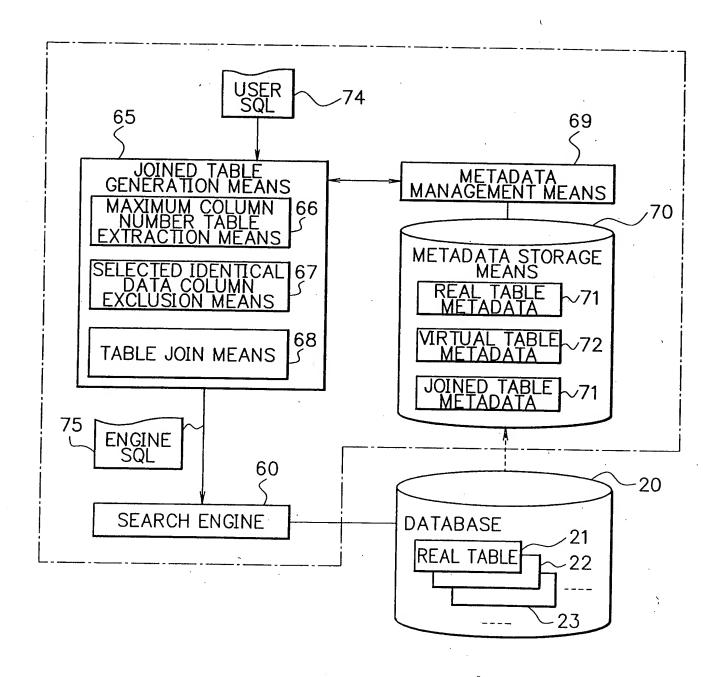


FIG. 10

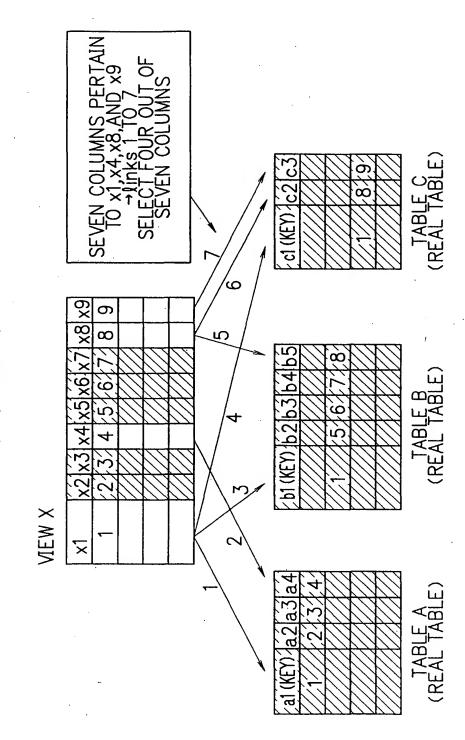
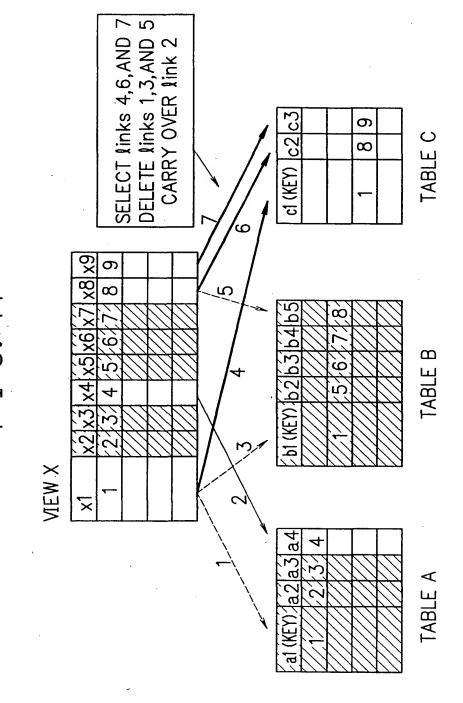


FIG. 11



 C_{i}

FIG. 12

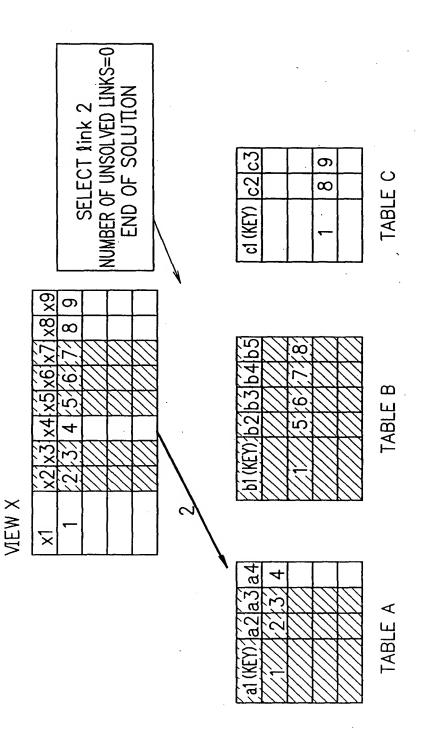


FIG. 13

